

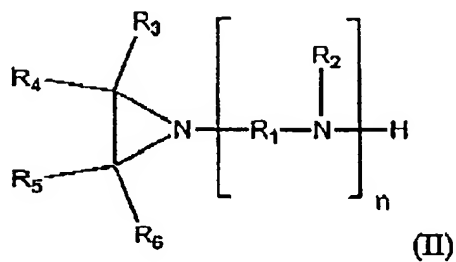
Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A method for treating a patient having an immune dysfunction, said method comprising the steps of:
 - (a) treating peripheral blood mononuclear cells with an effective amount of an aziridino-containing compound; and
 - (b) administering said peripheral blood mononuclear cells to said patient, thereby treating said immune dysfunction in said patient, and
wherein said immune dysfunction is cutaneous T-cell lymphoma, graft versus host disease, allograft rejection following organ transplantation, systemic lupus erythematosus, systemic sclerosis, inflammatory bowel disease, or rheumatoid arthritis.

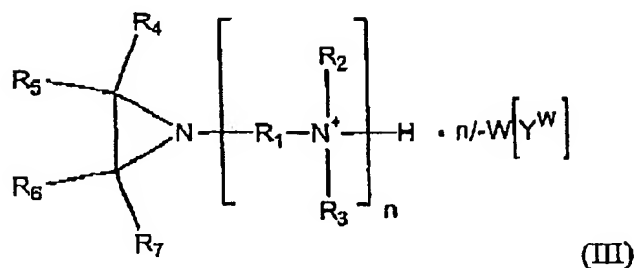
Claim 2 (cancelled).

3. (original) The method of claim 1 wherein said compound has the formula (II):



wherein each R_1 is a divalent hydrocarbon moiety containing between 2 and 4 carbon atoms, inclusive; each of R_2 , R_3 , R_4 , R_5 , and R_6 is, independently, H or a monovalent hydrocarbon moiety containing between 1 and 4 carbon atoms; and n is an integer between 1 and 10, inclusive.

4. (original) The method of claim 1, wherein said compound is ethyleneimine dimer.
5. (original) The method of claim 1, wherein said compound is an ethyleneimine trimer.
6. (original) The method of claim 1, wherein said compound is an ethyleneimine tetramer.
7. (currently amended) The method of claim 1, wherein said compound has the formula (III):



wherein each R_1 is a divalent hydrocarbon moiety containing between 2 and 4 carbon atoms, inclusive; each of R_2 , R_3 , R_4 , R_5 , R_6 , and R_7 is, independently, H or a monovalent hydrocarbon moiety containing between 1 and 4 carbon atoms; X is Cl or Br, Y is a

pharmaceutically acceptable counter anion; W is valency of Y; and n is an integer between 1 and 10, inclusive.

8. (cancelled)

9. (currently amended) A method for treating a patient having an immune dysfunction, said method comprising the steps of:

(a) extracorporeally treating peripheral blood mononuclear cells from said patient with an effective amount of an aziridino-containing compound;

(b) ~~separately~~ separating said peripheral blood mononuclear cells from said aziridino-containing compound; and

(c) administering said peripheral blood mononuclear cells to said patient, thereby treating said immune dysfunction in said patient, and wherein said immune dysfunction is cutaneous T-cell lymphoma, graft versus host disease, allograft rejection following organ transplantation, systemic lupus erythematosus, systemic sclerosis, inflammatory bowel disease, or rheumatoid arthritis.

10. (original) A method for ~~preventing~~ inhibiting tissue transplantation or blood transfusion-associated graft-versus-host (GVH) disease in a patient, the method comprising the steps of:

(a) extracorporeally treating a blood composition with an effective amount of an aziridino-containing compound; and

(b) administering said treated blood cell population to said patient,

thereby ~~preventing~~ inhibiting tissue transplantation or blood transfusion-associated GVH disease in said patient.

11. (original) The method of claim 10, wherein said blood composition comprises peripheral blood mononuclear cells (PBMC).

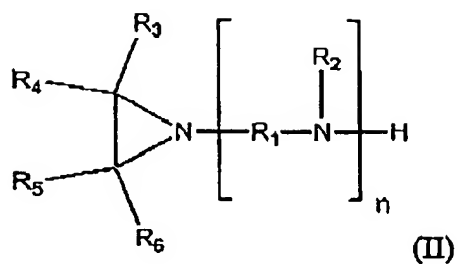
12. (original) The method of claim 10, wherein said blood composition is a non-leukoreduced blood cell concentrate.

13. (original) The method of claim 10, wherein said blood composition is a heterologous blood cell population.

14. (original) The method of claim 10, wherein said method further separating said aziridino-containing compound from said treated blood cell composition prior to administering said treated blood composition to said patient.

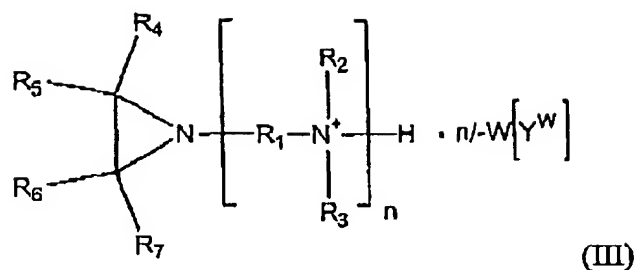
15. (original) The method of claim 14, wherein at least 99% of said aziridino-containing compound is removed from said treated blood cell composition prior to administering said treated blood composition to said patient.

16. (original) The method of claim 10, wherein said compound has the formula (II):



wherein each R₁ is a divalent hydrocarbon moiety containing between 2 and 4 carbon atoms, inclusive; each of R₂, R₃, R₄, R₅, and R₆ is, independently, H or a monovalent hydrocarbon moiety containing between 1 and 4 carbon atoms; and n is an integer between 1 and 10, inclusive.

17. (original) The method of claim 10, wherein said compound is an ethyleneimine dimer.
18. (original) The method of claim 10, wherein said compound is an ethyleneimine trimer.
19. (original) The method of claim 10, wherein said compound is an ethyleneimine tetramer.
20. (original) The method of claim 10, wherein said compound has the formula (III):



wherein each R₁ is a divalent hydrocarbon moiety containing between 2 and 4 carbon atoms, inclusive; each of R₂, R₃, R₄, R₅, R₆, and R₇ is, independently, H or a monovalent hydrocarbon moiety containing between 1 and 4 carbon atoms; X is Cl or Br, Y is a pharmaceutically acceptable counter anion; W is valency of Y; and n is an integer between 1 and 10, inclusive.

21. (cancelled)
22. (original) The method of claim 10, wherein said patient is a human.
23. (original) The method of claim 10, wherein said patient suffers from or is at risk for immune dysfunction.
24. (original) The method of claim 22, wherein said human patient suffers from or is at risk for immune dysfunction.
25. (currently amended) A method for ~~preventing~~ treating graft-versus-host (GVH) disease in a patient, the method comprising the steps of:

(a) treating a heterologous blood composition with an effective amount of an ethylene oligomer compound;

(b) removing said ethylene oligomer from said heterologous treated blood composition; and

(c) administering said treated blood cell population to said patient, thereby ~~preventing~~ treating GVH disease in said patient.

26. (original) The method of claim 25, wherein said patient is a human.

27. (original) The method of claim 25, wherein said compound is an ethyleneimine dimer.

28. (original) The method of claim 25, wherein said compound is an ethyleneimine trimer.

29. (original) The method of claim 25, wherein said compound is an ethyleneimine tetramer.

30. (original) A method for treating graft-versus-host (GVH) disease in a patient, the method comprising the steps of:

(a) treating a heterologous blood composition with an effective amount of an aziridino-containing compound; and

(b) administering said treated blood cell population to said patient,

thereby treating GVH disease in said patient.

31. (original) A method for ~~preventing~~ inhibiting tissue transplantation or blood transfusion-associated graft-versus-host (GVH) disease in a patient, the method comprising the steps of:

(a) treating a heterologous blood composition with an effective amount of an ethylene oligomer compound;

(b) removing said ethylene oligomer from said heterologous treated blood composition; and

(c) administering said treated blood cell population to said patient, thereby ~~preventing~~ inhibiting blood transfusion-associated or blood transfusion-associated GVH disease in said patient.

32. (original) A method for ~~preventing an~~ inhibiting a tissue transplantation or blood transfusion-associated alloantibody response in a patient, the method comprising the steps of:

(a) treating a heterologous blood composition with an effective amount of an aziridino-containing compound; and

(b) administering said treated blood cell population to said patient, thereby ~~preventing~~ inhibiting said blood transfusion-associated alloantibody response in said patient.

Claims 33-35 (cancelled)

Applicants: Fast et al.
U.S.S.N. 10/036,768

Claim 36 (new) The method of claim 1, wherein the peripheral blood mononuclear cells are contacted with a non-viricidal amount of said aziridino-containing compound.